

ABSTRACT

The invention relates to a method and apparatus for manufacturing a semi-solid metal slurry, and more particularly to a method and apparatus for manufacturing a semi-solid metal slurry having a uniform spherical structure through a simple process. The method comprises the steps of feeding molten metal into a furnace, agitating the molten metal in the furnace by application of an electromagnetic field through an electromagnetic agitator to remove a temperature difference in the molten metal while suppressing growth of dendrites, performing rapid cooling to remove a specific heat and latent heat of the molten metal emitted from the furnace in a cooling part to prevent oxidation of the molten metal in an inert atmosphere while preventing dendrites from being formed therein, and storing the cooled semi-solid metal slurry dropped through a guide member positioned at an angle such that the semi-solid metal slurry is uniformly distributed in a slurry storing container.